

Amendments to the Claims:

1. (Previously presented) A compact head up display for a firearm, comprising:

- (a) a base cooperatively engaging the firearm;
- (b) a diffractive optic mounted to the base;
- (c) a coherent illuminating beam source for illuminating the diffractive optic;
- (d) a power source selectively connected to the coherent illuminating beam source;
- (e) a light valve optically intermediate the diffractive optic and the coherent illuminating beam source; and
- (f) an image generator connected to the light valve for creating an image on the light valve.

2. (Original) The compact head up display of Claim 1, wherein the diffractive optic is a hologram.

3. (Original) The compact head up display of Claim 1, wherein the diffractive optic is tilted with respect to the axis of the coherent illuminating beam source.

4. (Original) The compact head up display of Claim 1, wherein the diffractive optic is a hologram having a recorded image of an infinitely spaced focal plane.

5. (Original) The compact laser sight of Claim 1, wherein the light valve is a liquid crystal diode.

6. (Original) The compact head up display of Claim 1, wherein the image appears as a reconstructed image at a plane located from adjacent the user to infinity at infinity.

7. (Previously presented) The compact head up display of Claim 1, wherein the coherent illuminating beam source is a laser.

8. (Original) The compact head up display of Claim 1, further comprising a range finder cooperatively connected to one of the image generator and the light valve for incorporating range information into the image.

9. (Previously presented) The compact head up display of Claim 1, further comprising an optical surface illuminated by the coherent illuminating beam source to form a targeting beam of coherent light.

10. (Previously presented) A compact head up display for a handheld firearm, comprising:

- (a) a hologram mounted relative to the handheld firearm;
- (b) a laser for illuminating the hologram;
- (c) an image generator; and
- (d) a light valve optically intermediate the hologram and the laser and operably connected to the image generator.

11. (Cancelled).

12. (Previously presented) The compact head up display of Claim 10, wherein the hologram is moveable connected to the firearm between a closed position and an open position.

13. (Previously presented) The compact head up display of Claim 10, further comprising one of a passive and active night vision system operably connected to the light valve.

14. (Original) The compact head up display of Claim 10, further comprising a range finder operably coupled to the light valve.

15. (Cancelled).

16. (Previously presented) The compact head up display of Claim 1, wherein the diffractive optic is transmissive.

17. (Previously presented) The compact head up display of Claim 1, wherein the diffractive optic is reflective.

18. (Previously presented) The compact head up display of Claim 10, wherein the hologram is transmissive.

19. (Previously presented) The compact head up display of Claim 10, wherein the hologram is reflective.